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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/852,304	05/10/2001	Chan Kim	11349-P66638US0	4724
43569	7590	11/15/2005		EXAMINER
MAYER, BROWN, ROWE & MAW LLP				MURPHY, RHONDA L
1909 K STREET, N.W.				
WASHINGTON, DC 20006			ART UNIT	PAPER NUMBER
			2667	

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/852,304	KIM ET AL.
	Examiner Rhonda Murphy	Art Unit 2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 30 August 2005.  
 2a) This action is FINAL.                  2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-9 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1 and 2 is/are rejected.  
 7) Claim(s) 3-9 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 01 March 2005 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1.) Certified copies of the priority documents have been received.  
 2.) Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3.) Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____ .

**DETAILED ACTION**

***Response to Amendment***

1. This communication is responsive to the amendment filed on August 30, 2005.

Accordingly, claims 1-9 are currently pending in this application.

***Specification***

1. The disclosure is objected to because of the following minor informalities:

On page 10, line 6, "vale" shall be replaced with "value".

On page 11, line 12, "includes" shall be replaced with "included".

On page 13, line 17, "541" shall be replaced with "542".

On page 13, line 19, "550" shall be replaced with "551".

On page 14, line 5, "50" shall be replaced with "51".

On page 14, line 7, "541" shall be replaced with "543".

On page 16, line 19, "50" shall be replaced with "51".

On page 16, line 26, "till" shall be replaced with "until".

On page 18, line 15, "50" shall be replaced with "52".

On page 19, line 1, "407" shall be replaced with "507".

On page 21, line 3, "30" shall be replaced with "543".

On page 22, line 26, "OMA" shall be replaced with "OAM".

On page 23, line 3, "till" shall be replaced with "until".

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karasawa (US 6,665,315) in view of Kasa et al. (US 2002/0085583).

**Regarding claim 1,** Karasawa teaches a cell receiving means (Fig. 3, receiving unit 20) for receiving an ATM cell from the PON downstream data (col. 4, lines 49-51) and transferring an ATM cell through a receiving interfacing means to an external means (col. 4, lines 49-63; the cell is received by receiving unit 20 and transferred to the cell detection unit 21) and transferring a message in a PLOAM (Physical Layer Operation and Maintenance) cell to a message processing means (col. 4, lines 55-59); a cell transmitting means (Fig. 3, transmitting unit 28) for transmitting the ATM cell received through a transmitting UTOPIA interfacing means in a granted slot (col. 3, lines 66-67; col. 4, lines 1-10; granting slots for ATM cell transmission is known in the art) and transferring in upstream by loading the message being on standby in payload of the PLOAM cell when the PLOAM cell is transmitted (col. 5, lines 20-29); and the message processing means (Fig. 3, message analysis unit 24) for setting internal signals by processing the received message or instructing operation of a plurality of functional blocks (col. 5, lines 5-8; “reads and analyzes the messages...sets the delay value in the delaying unit 27”), and transferring the message requested by the plurality of functional

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blocks through the cell transmitting means (see Fig. 3, the path from delaying unit 27 to transmitting unit 28).

Karasawa fails to explicitly disclose a utopia interfacing means.

However, utopia interfacing means in ATM systems are well known in the art for testing and operation purposes.

Therefore, it would have been obvious to one skilled in the art to include a utopia interfacing means in order to perform tests and operation functions, thus providing a more reliable system.

Although Karasawa fails to explicitly disclose demultiplexing, Karasawa teaches extracting downstream PLOAM cells from the cell stream output (col. 4, lines 55-56). Furthermore, Kasa teaches a demultiplexer for extracting PLOAM cells (page 2, paragraph 35).

Therefore, it would have been obvious to one skilled in the art to transfer a message in a PLOAM cell by demultiplexing, in order to extract the PLOAM cell from the data stream.

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Karasawa as applied to claim 1 above, and further in view of Yuki (US 6,778,557).

**Regarding claim 2,** Karasawa teaches a cell transmitting means.

Karasawa fails to teach an enable signal for mini-slot payload and receiving mini-slot payload bytes and sending them upstream on the mini-slot for using an arbitrary mini-slot report format.

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However Yuki teaches an enable signal for mini-slot payload and receiving mini-slot payload bytes and sending them upstream on the mini-slot for using an arbitrary mini-slot report format (col. 27, lines 5-25).

In view of this, it would have been obvious to one skilled in the art to modify Karasawa's system, by enabling data loaded in a mini-slot to output an enable signal, so as to improve communications efficiency and reduce buffer memory requirements (col. 29, lines 31-33).

#### ***Allowable Subject Matter***

4. Claims 3 – 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rhonda Murphy whose telephone number is (571) 272-3185. The examiner can normally be reached on Monday - Friday 8:00 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rhonda Murphy  
Examiner  
Art Unit 2667

rlm

  
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SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2000 01/01/01